delimiter and "$Sheet1.A1:A5,$Sheet1.D1:D5" is a valid data range. A semi-colon is another commonly used delimiter.

The appropriate delimiter depends on the option selected in the *Locale setting* menu on the *Formats* section at **Tools > Options > Language Settings > Languages**. See or change the default delimiter for a locale at **Tools > Options > LibreOffice Calc > Formula**. In the *Separators* section, *Array column* shows the default delimiter.

> ✅ **Note**
>
> The options under **Tools > Options** may not be available when the chart is in edit mode. If desired, click outside the chart to leave edit mode and see the options. Click the chart twice to enter edit mode again.

To select non-adjacent data, do one of the following while in step 1) above:

- Manually enter the data ranges in the text box with delimiter(s) between them.
- Select the data with the cursor by first clicking the **Select data range** button to the right of the *Data range* box. Place the cursor at the end of the first data range in the text box (otherwise the first range is selected and then deleted) and enter the delimiter. Then drag the cursor in the spreadsheet to select the next data range.

> ✅ **Note**
>
> When the data is in the same document as the chart, changes to the data are instantly reflected in the chart.

Linking to external data

Calc offers several options for linking data to external sources. This enables data (and the chart using the data) to automatically update when the external data changes. The following types of files can be linked: HTML, Calc, Base, CSV, Excel, and registered data sources. For further information, refer to Chapter 10, Linking Data.

Selecting data series

The Data Series page of the Chart Wizard (Figure 76) enables fine tuning of the data. Each data series contains a set of data that have something in common, such as the types of rental equipment listed in Figure 72. Use the Data Series page to change the source range of each data series and to organize how the data is presented in the chart. This includes removing unnecessary data and specifying how data is plotted along the axes.

Organizing data series

> ℹ️ **Tip**
>
> The Chart Wizard makes initial assumptions about how the data should be displayed, but the assumptions could be incorrect. If a chart does not look as expected, the first thing to check is if all data series are defined correctly.
>
> Also, check the settings on the Data Range page that define whether the data are in rows or columns and whether the first row or first column should be considered labels.

The names of each data series appear in the *Data series* list box (the middle box in Figure 76). To organize the data series, select an entry in the *Data series* list and do one or more of the following: